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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,706	08/01/2001	Kenichi Nanpei	1232-4747	5403
27123	7590	07/22/2008		
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101				
EXAMINER				
HUNTSINGER, PETER K				
ART UNIT		PAPER NUMBER		
2625				
NOTIFICATION DATE		DELIVERY MODE		
07/22/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com

Shopkins@Morganfinnegan.com

jmedina@Morganfinnegan.com

## Office Action Summary

**Application No.**

09/919,706

**Applicant(s)**

NANPEI, KENICHI

**Examiner**

Peter K. Huntsinger

**Art Unit**

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4-10, 13-18 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1, 4-10, 13-18 and 21-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 4/9/08 have been fully considered but they are not persuasive.

The applicant argues on page 12 of the response in essence that:  
Yamamoto '645 teaches away from entering a sleep mode when a cable is disconnected.

a. Yamamoto '645 discloses multiple embodiments of the invention. One embodiment of Yamamoto '645 teaches entering a sleep state in response to detection of any unplugging of the interface cable (col. 13, lines 46-57, when disconnection of cable 7 is recognized, the apparatus changes to sleep mode). Yamamoto '645 further describes executing a power-off routine when it is determined that cable 7 is disconnected (Fig. 20, col. 30, lines 46-57).

The applicant argues on page 12 of the response in essence that:  
Kuga '338 and Yamamoto '645 relate to different types of systems.

b. In response to applicant's argument that Kuga '338 and Yamamoto '645 are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Kuga '338 and

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Yamamoto '645 both relate to the problem of detecting a condition for entering sleep mode.

The applicant argues on page 12 of the response in essence that:

It is unclear why a copy machine would enter a sleep mode when the machine is disconnected from the personal computer.

c. The motivation for combining Yamamoto '645 with Kuga '338 is to save power to a device when the device is unable to receive data from the host computer (Yamamoto '645, col. 13, lines 46-57). Kuga '338 discloses a device that is connected to a host computer (col. 8, lines 34-36). Therefore, by combining Yamamoto '645 with the system of Kuga '338, the digital copying machine would be able to save power when unable to receive data from the host computer.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 5, 7-10, 13, 15-18, 21 and 23-28 are rejected under 35 U.S.C.

103(a) as being unpatentable over Kuga '338, and further in view of Yamamoto '645 and well known prior art.

Referring to **claim 1**, Kuga '338 discloses an image reading apparatus (scanner 2 of Fig. 3) which operates with power supplied from an external power supply (inherent copy machine must be plugged in to receive power) under control of an external apparatus and which comprises an image sensing unit for reading an image, and an interface connected to the external apparatus through an interface cable (col. 8, lines 34-36, personal computer can be connected), the image reading apparatus comprising:

wherein at least one of an internal circuit and mechanical position of the image sensing unit is initialized to a state identical to a state at the time when the apparatus is powered on before or after the apparatus is set to the sleep state (col. 11, lines 25-29, after entering preheating (power-saving) mode, all display lamps turned off), and

wherein power from the external power supply is not provided to the image reading apparatus across the interface cable but is provided across a separate cable (inherent copy machine must be plugged in to receive power).

Kuga '338 does not disclose expressly detecting an unplugging of the interface cable.

Yamamoto '645 discloses a detector for detecting an unplugging of the interface cable on the basis of an electric potential of a predetermined position of the interface (col. 13, lines 45-57, disconnection of cable 7 detected when enable signal does not change to a low level); and

a controller for setting said apparatus in a sleep state with the apparatus being supplied with power from the external power supply (receives power from commercial power supply 121), in response to detection of any unplugging of the interface cable

during an image reading process controlled by the external apparatus, until the communication with the external apparatus restarts (col. 13, lines 46-57, when disconnection of cable 7 is recognized, the apparatus changes to sleep mode).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to enter a sleep mode when a data cable is disconnected. The motivation for doing so would have been to reduce the device's power consumption.

Kuga '338 does not disclose expressly transferring an image signal read by the image sensing unit to the external apparatus.

Official Notice is taken that it is well known and obvious to transfer a scanned image signal to an external apparatus (See MPEP 2144.03). The motivation for doing so would have been to store the image on a computer for future use. Therefore, it would have been obvious to combine Yamamoto '645 and well known prior art with Kuga '338 to obtain the invention as specified in claim 1.

Referring to **claim 4**, Kuga '338 discloses wherein the image sensing unit comprises:

- a light source for irradiating a document with light (Exposure lamp 6 of Fig. 3);
- an image sensor for converting light reflected by a document irradiated with light from said light source into an electrical image signal (CCD sensor 11 of Fig. 3);
- a moving unit for moving a relative position between an image of the document and said image sensor (Scanner motor 166 of Fig. 3); and
- a setting unit for stopping power supply to at least one of said light source and said moving unit in the sleep state in accordance with a setup of said controller (col. 11,

lines 25-29, after entering preheating (power-saving) mode, all display lamps turned off).

Referring to **claim 5**, Kuga '338 discloses an A/D converter for converting the image signal output from the image sensing unit into a digital signal (A/D convert of Fig. 3).

Official Notice is taken that it is well known and obvious to transfer the digital image signal converted by said A/D converter to the external apparatus (See MPEP 2144.03).

Referring to **claim 7**, Yamamoto '645 discloses wherein said detector detects unplugging of the interface by detecting a change in a voltage-level of a data line included in the interface (col. 13, lines 45-57, disconnection of cable 7 detected when enable signal does not change to a low level).

Referring to **claim 8**, Yamamoto '645 discloses wherein the interface has a function of allowing to plug/unplug a cable without turning off a power supply of the external apparatus (col. 13, lines 45-57, disconnection of cable 7 detected when enable signal does not change to a low level).

Referring to **claim 9**, Kuga '338 discloses an interface cable but does not disclose expressly wherein the interface cable complies with USB or IEEE1394.

Official Notice is taken that it is well known and obvious to connect a peripheral device to a computer with a USB cable (See MPEP 2144.03). The motivation for doing so would have been utilize commonly available computer port to connect the devices.

Therefore it would have been obvious to combine well known prior art with Kuga '338 and Yamamoto '645 to obtain the invention as specified in claim 9.

Referring to **claim 10**, see the rejection of claim 1 above.

Referring to **claim 13**, see the rejection of claim 5 above.

Referring to **claim 15**, see the rejection of claim 7 above.

Referring to **claim 16**, see the rejection of claim 8 above.

Referring to **claim 17**, see the rejection of claim 9 above.

Referring to **claim 18**, see the rejection of claim 1 above.

Referring to **claim 21**, see the rejection of claim 5 above.

Referring to **claim 23**, see the rejection of claim 7 above.

Referring to **claim 24**, see the rejection of claim 8 above.

Referring to **claim 25**, see the rejection of claim 9 above.

Referring to **claim 26**, see the rejection of claim 1 above.

Referring to **claim 27**, see the rejection of claim 8 above.

Referring to **claim 28**, see the rejection of claim 9 above.

4. Claims 6, 14, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuga '338, Yamamoto '645 and well known prior art, as applied to claims 1, 10, and 22 above, and further in view of Masuda '585.



Referring to **claim 6**, Yamamoto '645 discloses detecting unplugging of the interface but does not disclose expressly detecting a change in potential of a power supply line.

Masuda '585 discloses wherein a detector detects unplugging of the interface by detecting a change in potential of a power supply line included in the interface (S50 of Fig. 5B, col. 6-7, lines 65-68, 1-11).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to determining an unplugged connection by a change in a power supply line. The motivation for doing so would have been to check an abnormal condition of a power supply. Therefore, it would have been obvious to combine Masuda '585 with Kuga '338, Yamamoto '645, and well known prior art to obtain the invention as specified in claim 6.

Referring to **claim 14**, see the rejection of claim 6 above.

Referring to **claim 22**, see the rejection of claim 6 above.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (571)272-7435. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter K Huntsinger/  
Examiner, Art Unit 2625

/David K Moore/  
Supervisory Patent Examiner, Art Unit 2625